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The set of claims set forth below replaces all prior versions of the claims in the application.

1. (amended herein) A method of identifying homologous recombination in plant cells, the method comprising:

contacting a plurality of plant cells with a heterologous nucleic acid molecule comprising a fusion polynucleotide comprising a sequence encoding [a fusion protein comprising] a polypeptide sequence of interest linked to a reporter sequence, wherein the nucleic acid molecule lacks sequences necessary for expression of the fusion polynucleotide gene product [protein] in a cell; and

detecting the presence of the reporter activity in the plant cells, thereby identifying plant cells in which homologous recombination has occurred between the introduced heterologous nucleic acid molecule and [endogenous] plant DNA.

2. (original) The method of claim 1, wherein the step of contacting is carried out using a T-DNA vector.

3. (original) The method of claim 1, further comprising the step of regenerating plants from the plant cells before the step of detecting the presence of the fusion sequence gene product.

4. (original) The method of claim 1, wherein the reporter sequence is non-selective.

5. (original) The method of claim 4, wherein the non-selective reporter sequence encodes luciferase.

6. (original) The method of claim 5, wherein the step of detecting is carried out using video imaging equipment.

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7. (original) The method of claim 1, wherein the plant cell is  
*Arabidopsis*.

Claims 8-12 Cancelled herein

Claims 13-31 Withdrawn